

PATENT

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
APPLICATION FOR PATENT

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ON

FOOD AND BEVERAGE TRAY

BY

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FOOD AND BEVERAGE TRAY

[0001] This application claims the benefit of U.S. Provisional Patent
Application No. 60/459,213, filed April 1, 2003, which is hereby incorporated by
5 reference in its entirety.

FIELD OF THE INVENTION

[0002] The present invention relates to food and beverage trays, and more
10 particularly, to a portable, disposable food and beverage tray allowing easy access to
all food and beverage items while preventing contamination of food from a beverage
and designed to be an advertising and promotional vehicle.

BACKGROUND OF THE INVENTION

15 [0003] Disposable trays for food and beverage items are commonly used at
carryout restaurants, stadiums, arenas, and theatres. Quite often a tray or carrier is
provided by the establishment when more than one or two items are to be carried.
These trays or carriers need to be inexpensive, readily transportable, compactly
20 stored, quickly convertible from a stored configuration to the desired configuration
for use, and easily loaded. Additionally, these trays need to safely, securely, and
conveniently carry beverage containers as well as food items.

[0004] Several U.S. Patents have been granted for food and beverage carriers.
25 For example, U.S. Patent Nos. 6,068,127 and 5,927,502, issued to Hunter, disclose
foldable carriers for transporting a plurality of food or beverage containers. The
Hunter patents consist essentially of a beverage carrier and a separate food carrier that
can be connected and carried together. In U.S. Patent No. 6,068,127, a cardboard
beverage carrier has a slot through which the handle of a closed food carrier box
30 slides through. In U.S. Patent No. 5,927,502, a cardboard food box has a slot in the

bottom, through which the handle of a beverage carrier slides through. In both of these patents, the food and the beverage cannot be accessed at the same time without separating the two carriers. Not only is this inconvenient for the user, but it adds complexity and time to the carrier loading process at the point of purchase.

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[0005] U.S. Patent No. 6,527,123, issued to Ausaf, discloses a one piece foldable box enclosing a food receptacle. The one piece box has a planar bottom panel, attached by a first side member to a top cover panel and by a second side member to a planar food tray cover panel. Third and fourth side members are folded
10 upwardly and the end portions folded inwardly to enclose a Styrofoam food or beverage insert. After food or beverage containers are placed in depressions of the food or beverage insert, the top cover panel encloses the food and beverage items to close the box. While the Ausaf invention may be useful for transporting items without spillage or contamination, it requires the presence of the Styrofoam insert,
15 which adds cost and complexity to the tray. Additionally, the top cover panel must be removed before the food and beverage items are consumed. This creates excess waste and creates a potentially hazardous situation if the top cover panel is used as a flying object (as is too often the case at sporting events).

20 [0006] U.S Patent No. 4,572,423, issued to Spence, discloses a take-out box with a cup and lid retainer. Specifically, the Spencer invention is designed to lock an inner container for soup, salad, or beverage in a closed stationary position so that the inner container cannot accidentally open and spill its contents over other food in the box or on the person or vehicle carrying the box. However, the benefits of the
25 Spencer invention are defeated when the user opens the box to access the food, that is, the inner container is no longer secure when the box is open.

[0007] Numerous other variants of food and beverage tray exist. For example, U.S. Patent No. 5,678,694, issued to Tanaka et al., discloses a food and

beverage tray wherein at least one finger of a hand may be used to stabilize and hold the beverage container while the remaining fingers and palm of the hand are used to stabilize the tray. U.S. Patent No. 6,523,693, issued to Eggenberger et al., discloses a convertible packaging system for shipping, storing, and displaying a first merchandise
5 item and for carrying a second merchandise item. U.S. Patent Nos. 5,069,375 and RE37,239, issued to Flick and Eisenberg respectively, disclose food trays designed to rest on a user's lap, particularly when the user is in a motor vehicle.

[0008] Unfortunately, none of the above mentioned inventions disclose a
10 portable, disposable food and beverage tray that allows quick and convenient loading, and easy access to all food and beverage items while preventing contamination of food from a beverage, and while simultaneously serving as an advertising and promotional vehicle.

15 [0009] Therefore, it would be advantageous to provide a disposable food and beverage tray that is easily portable, allows quick and convenient loading, allows easy access to all food and beverage items, prevents contamination of food from a beverage, and serves as an advertising and promotional vehicle.

SUMMARY OF THE INVENTION

- [0010] In view of the deficiencies described above, disclosed is a disposable food and beverage tray that is easily portable, allows quick and convenient loading, allows easy access to all food and beverage items, prevents contamination of food from a beverage, and serves as an advertising and promotional vehicle. Various embodiments of the present invention allow the attachment of a harness to assist in carrying the food and beverage tray. Other embodiments of the present invention allow the present invention to conveniently be used in a motor vehicle.
- [0011] The food and beverage tray has a first side panel, a second side panel, a bottom panel, and a top panel. The top panel has beverage container openings and food item openings. Substantially vertical support members, such as flaps, are used to secure the tray in a substantially rectangular shape and separate the beverage openings and food item openings. By separating the two areas, contamination of the food items is reduced or prevented. When the flaps are disengaged, the tray is collapsible.
- [0012] The beverage container openings can have starburst cuts around the perimeter of each beverage container opening. The starburst cuts help hold the beverage container in a secure manner and allow for a range of beverage container sizes. The number and location of beverage container openings is a matter of choice and the present invention can be made in a variety of configurations.
- [0013] The present invention can be formed from a single piece of material. Material selection is a matter of cost, durability and strength. The present invention can be made from a cardboard material, such as eflute cardboard. Preferably the material used for the present invention is light weight, durable, inexpensive and recyclable, and provides rigidity.

[0014] The tray may have one or more removable portions. The removable portions can be located in any of the panels. The removable portions can have perforated edges to facilitate easy removal. The removable portions can be an autograph card, a collector card, a coupon, or a promotional item.

[0015] The present invention may be fitted with an optional harness system. The harness system can be a string or strap that loops through holes in the top panel that is adapted to loop around the neck of a user.

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[0016] The present invention may also be configured for use in a motor vehicle. The tray has a door engagement flap connected to the top panel that is designed to be inserted into the top of a motor vehicle door. The door engagement flap can be inserted into the door along the line where a movable window slides into the door. Optionally, the bottom or side panel can further engage the door in a substantially perpendicular manner to support the tray in a substantially horizontal position.

[0017] The present invention provides a significant surface area on which promotional material may be printed. The promotional material can include printed information, pictures, advertisements and the like.

[0018] Other features and advantages of the invention will be apparent from the following detailed description taken in conjunction with the following drawings wherein like reference numerals represent like features.

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BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a perspective view of one embodiment of the present invention.

Fig. 2 illustrates the collapsible nature of the present invention.

5 Fig. 3 illustrates an embodiment of the present invention in a prefolded condition.

Fig. 4 illustrates another embodiment of the present invention in a prefolded condition.

10 Fig. 5 illustrates another embodiment of the present invention in a prefolded condition.

Fig. 6 is a perspective view of another embodiment of the present invention.

Fig. 7 is a second perspective view of another embodiment of the present invention.

Fig. 8 is a perspective view of another embodiment of the present invention.

15 Fig. 9 is a perspective view of another embodiment of the present invention.

Fig. 10 illustrates another embodiment of the present invention in a prefolded condition.

DETAILED DESCRIPTION OF THE INVENTION

[0019] While this invention is susceptible of embodiments in many different forms, there is shown in the drawings and will herein be described in detail several
5 embodiments of the invention with the understanding that the present disclosure is to be considered as an exemplification of the principles of the invention and is not intended to limit the broad aspect of the invention to the embodiments illustrated.

[0020] The present invention is a disposable food and beverage tray that is
10 easily portable, allows quick and convenient loading, easy access to all food and beverage items, prevents contamination of food from a beverage, and serves as an advertising and promotional vehicle. Various embodiments of the present invention allow the attachment of a harness to assist in carrying the food and beverage tray. Other embodiments of the present invention allow the present invention to
15 conveniently be used in a motor vehicle.

[0021] Fig. 1 is a perspective view of a first embodiment of the present invention. The food and beverage tray 100 has a first side panel 110, a second side panel 120, a bottom panel 130 and a top panel 140. The top panel 140 has beverage
20 container openings 150 and food item openings 160. The beverage container openings 150 and food item openings 160 provide easy access to the food and drinks while securely holding them. Substantially vertical support members, shown in Fig. 2 as flaps 170, are used to secure the tray 100 in a substantially rectangular shape and separate the beverage container opening 150 area and the food item opening 160 area.
25 By separating the two areas, contamination of the food items is reduced or prevented in the event that some of the beverage is spilled onto the tray 100.

[0022] As shown in Fig. 2, the vertical support members can be flaps 170 formed from a portion of the top panel 140. As shown the flaps 170 can have tabs
30 180 that engage slots 190, shown in Fig 3, in the bottom panel 130. Fig. 2 also shows

the collapsible nature of the present invention when the flaps 170 are disengaged. The collapsible nature of the present invention allows for convenient shipping and storage of the present invention up until the invention is used. By requiring only the engagement of the flaps 170, final preparation for use is minimal, thus facilitating quick set up and loading at the point of purchase.

[0023] The beverage container openings 150 are substantially circular in shape. Optionally there are starburst cuts 200 in the top panel 140 around the perimeter of each beverage container opening. 150. Starburst cuts 200 serve several functions, first the starburst cuts 200 allow material of the top panel 150 to deflect when a beverage container of a slightly larger diameter than the beverage container opening 150 is placed in the opening. The deflected material exerts a holding force on the beverage container, thus holding the beverage container in a more secure manner. Additionally, beverage container openings 150 with starburst cuts 200 can securely hold beverage containers of a range of sizes.

[0024] Fig. 3 shows the first embodiment of the present invention in a prefolded condition. Fig. 3 shows how the present invention can be formed from a single piece of material. Material selection is matter of cost, durability and strength. The present invention can be made from a cardboard material, such as eflute cardboard. Preferably the material used for the present invention is light weight, durable, inexpensive, provides sufficient rigidity, and is recyclable. Fig. 3 also shows connecting panels 125. As shown, connecting panels 125 are used connect one end of the tray 100 to the other end, thus forming a substantially rectangular structure when the tray 100 is folded. Connecting panels 125 may be connected using glue or other conventional means known in the art.

[0025] Fig. 4 illustrates another embodiment of the present invention in a prefolded condition. In this embodiment, the tray 100 has two beverage container openings 150.

5 [0026] Fig. 5 illustrates a further embodiment of the present invention. In this embodiment, the tray 100 has four beverage container openings. Fig. 5 also illustrates bottom beverage container openings 260 in the bottom panel 130. Bottom beverage container openings 260 are an optional feature of the present invention and correspond to, and work in conjunction with, beverage container openings 150 in the
10 top panel 140. Bottom beverage container openings 260 may be used, for example, when a tall beverage container is being carried.

[0027] Fig. 6 is a perspective view of yet another embodiment of the present invention. In this embodiment, a removable portion 210 is shown. As shown, the
15 removable portion 210 is located in the bottom panel 120. However, removable portion 210 can be located in any or each of the first side panel 110, second side panel 120, bottom panel 130, and top panel 140. The removable portion 210 can have perforated edges to facilitate easy removal. The removable portion 210 can be any suitable item, such as an autograph card, a collector card, a coupon, or a promotional
20 item. Fig. 7 is a second perspective view of an embodiment of the present invention. Fig. 7 shows the removable portion 210 from the bottom of the tray 100.

[0028] Fig 8 is a perspective view of yet a further embodiment of the present invention. In Fig. 8, the tray 100 has a harness system 220 for supporting the tray 100
25 while the tray 100 is being carried. The harness system 220 can be a string or strap 240 that loops through holes 230 in the top panel 140. The strap 240 is adapted to loop around the neck of a user. The harness system 220 adds stability to the tray 100 while being carried and can free the hands of a user.

[0029] Fig. 9 is a perspective view of another embodiment of the present invention. Fig. 10 illustrates the present invention in a prefolded condition. In this embodiment the tray 100 is designed for use in a motor vehicle. The tray 100 has a door engagement flap 250 connected to the top panel 140 that is designed to be
5 inserted into the top of a motor vehicle door. The door engagement flap 250 can be inserted into the door along the line where a movable window slides into the door. Optionally, the bottom panel 130 can further engage the door in a substantially perpendicular manner to support the tray 100 in a substantially horizontal position.

10 [0030] The present invention, in each of the embodiment shown, provides a significant surface area on which promotional material may be printed. Promotional areas 270 are shown in several of the embodiments. The promotional material can be printed information, pictures, advertisements and the like. By providing promotional area 270, the tray 100 is no longer a vehicle simply to move food or drink from one
15 location to another, but can be part of the entire theme of an event or location and can be a part of an establishment's advertising and marketing strategy and message.

[0031] While the specific embodiments have been illustrated and described, numerous modifications come to mind without significantly departing from the spirit
20 of the invention, and the scope of protection is only limited by the scope of the accompanying claims.